

SEQUENCE LISTING

<110> BASF Aktiengesellschaft

<120> Preparing 3-methylamino-1-(thien-2-yl)propan-1-ol

<130> M/44142

<160> 6

<170> PatentIn version 3.1

<210> 1

<211> 47

<212> PRT

<213> Lactobacillus brevis

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Leu	Gly	Ile	Gly	Leu	Ala	Ile	Ala	Thr	Lys	Phe	Val	Glu	Glu	Gly	Ala
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<212> PRT

<213> Candida magnoliae

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Phe Ile

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<212> DNA

<213> Lactobacillus brevis

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Leu Gly Ile Gly Leu Ala Ile Ala Thr Lys Phe Val Glu Glu Gly Ala	
20 25 30	
aag gtc atg att acc ggc cgg cac agc gat gtt ggt gaa aaa gca gct	144
Lys Val Met Ile Thr Gly Arg His Ser Asp Val Gly Glu Lys Ala Ala	
35 40 45	
aag agt gtc ggc act cct gat cag att caa ttt ttc caa cat gat tct	192
Lys Ser Val Gly Thr Pro Asp Gln Ile Gln Phe Phe Gln His Asp Ser	
50 55 60	
tcc gat gaa gac ggc tgg acg aaa tta ttc gat gca acg gaa aaa gcc	240
Ser Asp Glu Asp Gly Trp Thr Lys Leu Phe Asp Ala Thr Glu Lys Ala	
65 70 75 80	
ttt ggc cca gtt tct aca tta gtt aat aac gct ggg atc gcg gtt aac	288
Phe Gly Pro Val Ser Thr Leu Val Asn Asn Ala Gly Ile Ala Val Asn	
85 90 95	
aag agt gtc gaa gaa acc acg act gct gaa tgg cgt aaa cta tta gcc	336
Lys Ser Val Glu Glu Thr Thr Thr Ala Glu Trp Arg Lys Leu Leu Ala	
100 105 110	

3

gtc aac ctt gat ggt gtc ttc ttc ggt acc cga tta ggg att caa cgg 384
 Val Asn Leu Asp Gly Val Phe Phe Gly Thr Arg Leu Gly Ile Gln Arg
 115 120 125
 atg aag aac aaa ggc tta ggg gct tcc atc atc aac atg tct tcg atc 432
 Met Lys Asn Lys Gly Leu Gly Ala Ser Ile Ile Asn Met Ser Ser Ile
 130 135 140
 gaa ggc ttt gtg ggt gat cct agc tta ggg gct tac aac gca tct aaa 480
 Glu Gly Phe Val Gly Asp Pro Ser Leu Gly Ala Tyr Asn Ala Ser Lys
 145 150 155 160
 ggg gcc gta cgg att atg tcc aag tca gct gcc tta gat tgt gcc cta 528
 Gly Ala Val Arg Ile Met Ser Lys Ser Ala Ala Leu Asp Cys Ala Leu
 165 170 175
 aag gac tac gat gtt cgg gta aac act gtt cac cct ggc tac atc aag 576
 Lys Asp Tyr Asp Val Arg Val Asn Thr Val His Pro Gly Tyr Ile Lys
 180 185 190
 aca cca ttg gtt gat gac cta cca ggg gcc gaa gaa gcg atg tca caa 624
 Thr Pro Leu Val Asp Asp Leu Pro Gly Ala Glu Glu Ala Met Ser Gln
 195 200 205
 cgg acc aag acg cca atg ggc cat atc ggt gaa cct aac gat att gcc 672
 Arg Thr Lys Thr Pro Met Gly His Ile Gly Glu Pro Asn Asp Ile Ala
 210 215 220
 tac atc tgt gtt tac ttg gct tct aac gaa tct aaa ttt gca acg ggt 720
 Tyr Ile Cys Val Tyr Leu Ala Ser Asn Glu Ser Lys Phe Ala Thr Gly
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<210> 4

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<212> PRT

<213> Lactobacillus brevis

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35

40

45

Lys Ser Val Gly Thr Pro Asp Gln Ile Gln Phe Phe Gln His Asp Ser
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Ser Asp Glu Asp Gly Trp Thr Lys Leu Phe Asp Ala Thr Glu Lys Ala
 65 70 75 80

Phe Gly Pro Val Ser Thr Leu Val Asn Asn Ala Gly Ile Ala Val Asn
 85 90 95

Lys Ser Val Glu Glu Thr Thr Thr Ala Glu Trp Arg Lys Leu Leu Ala
 100 105 110

Val Asn Leu Asp Gly Val Phe Phe Gly Thr Arg Leu Gly Ile Gln Arg
 115 120 125

Met Lys Asn Lys Gly Leu Gly Ala Ser Ile Ile Asn Met Ser Ser Ile
 130 135 140

Glu Gly Phe Val Gly Asp Pro Ser Leu Gly Ala Tyr Asn Ala Ser Lys
 145 150 155 160

Gly Ala Val Arg Ile Met Ser Lys Ser Ala Ala Leu Asp Cys Ala Leu
 165 170 175

Lys Asp Tyr Asp Val Arg Val Asn Thr Val His Pro Gly Tyr Ile Lys
 180 185 190

Thr Pro Leu Val Asp Asp Leu Pro Gly Ala Glu Glu Ala Met Ser Gln
 195 200 205

Arg Thr Lys Thr Pro Met Gly His Ile Gly Glu Pro Asn Asp Ile Ala
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Tyr Ile Cys Val Tyr Leu Ala Ser Asn Glu Ser Lys Phe Ala Thr Gly
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Ser Glu Phe Val Val Asp Gly Gly Tyr Thr Ala Gln
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<212> DNA

<213> Candida magnoliae

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<221> CDS

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att aag ctc gcc gag gag ggc tac agc gtc acg att gcg tct cgc ggc      96
Ile Lys Leu Ala Glu Glu Gly Tyr Ser Val Thr Ile Ala Ser Arg Gly
          20          25          30

ctt aag cag ctc gag gct gtg aag gcc aaa cta ccc att gtg aag cag      144
Leu Lys Gln Leu Glu Ala Val Lys Ala Lys Leu Pro Ile Val Lys Gln
          35          40          45

gga cag gtt cac cac gtg tgg cag ctt gat ctc agt gat gtc gac gct      192
Gly Gln Val His His Val Trp Gln Leu Asp Leu Ser Asp Val Asp Ala
          50          55          60

gcg gcc gcc ttc aaa ggg tcg ccg cta cct gcc agc cgc tac gac gtg      240
Ala Ala Ala Phe Lys Gly Ser Pro Leu Pro Ala Ser Arg Tyr Asp Val
65          70          75          80

ctc gtc agc aat gct ggc gtg gcc cag ttt agc ccg ttc atc gag cat      288
Leu Val Ser Asn Ala Gly Val Ala Gln Phe Ser Pro Phe Ile Glu His
          85          90          95

gcg aag cag gac tgg tcg cag atg ctt gcc atc aat ctg gcg gca ccc      336
Ala Lys Gln Asp Trp Ser Gln Met Leu Ala Ile Asn Leu Ala Ala Pro
          100          105          110

att gcg ctg gcc cag aca ttt gct aag gcc att ggc gac aag ccg cgc      384
Ile Ala Leu Ala Gln Thr Phe Ala Lys Ala Ile Gly Asp Lys Pro Arg
          115          120          125

aac aca ccg gcc cac att gtg ttt gtc tcg tcg aac gtc tcg ttg cga      432
Asn Thr Pro Ala His Ile Val Phe Val Ser Ser Asn Val Ser Leu Arg
          130          135          140

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<210> 6

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<212> PRT

<213> Candida magnoliae

<400> 6

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Leu Lys Gln Leu Glu Ala Val Lys Ala Lys Leu Pro Ile Val Lys Gln
 35 40 45

Gly Gln Val His His Val Trp Gln Leu Asp Leu Ser Asp Val Asp Ala
 50 55 60

Ala Ala Ala Phe Lys Gly Ser Pro Leu Pro Ala Ser Arg Tyr Asp Val
 65 70 75 80

Leu Val Ser Asn Ala Gly Val Ala Gln Phe Ser Pro Phe Ile Glu His
 85 90 95

Ala Lys Gln Asp Trp Ser Gln Met Leu Ala Ile Asn Leu Ala Ala Pro
 100 105 110

Ile Ala Leu Ala Gln Thr Phe Ala Lys Ala Ile Gly Asp Lys Pro Arg
 115 120 125

Asn Thr Pro Ala His Ile Val Phe Val Ser Ser Asn Val Ser Leu Arg
 130 135 140

Gly Phe Pro Asn Ile Gly Val Asn Ser Ile Thr Pro Gly
 145 150 155